



Customer Value Exercise

A customer value exercise was attempted during the afternoon breakout session as described in the following instruction sheet. The reader of this document is cautioned to not place much attention on the “numbers”. Limited time for the exercise along with considerable discussion regarding the definition of value and it’s relationship to quality, price, etc. stressed the teams to complete the assignment per instructions. *(Although the group was near revolt at one stage of the game they pulled together and turned the session into a “value added” exercise)*

Yes, there was great value in the discussions during report outs. The list of quality attributes will prove useful along with a general impression that AEDC views it’s value to it’s customers somewhat higher than what our customers do – now that’s useful information!



Breakout Session

- **Purpose**

Define Customer Value from our customer's viewpoint as a guide to help AEDC understand where to put emphasis in order to increase Customer Value



Potential Cost Reductions

- **Continued Productivity Improvement**
- **Use ABC principles to drive out non-value added costs**
- **Reduce service level**
- **Eliminate facilities/capabilities**



Worksheet

Customer Value Worksheet

A. Relative Quality

		Performance Scores: 1-10, 10 is best							
		AEDC			Other Sources			Weighted Scores	
		Consensus	Min	Max	Consensus	Min	Max	AEDC	Industry
1								0	0
2								0	0
3								0	0
4								0	0
5								0	0
6								0	0
7								0	0
8								0	0
9								0	0
10								0	0
Sum of Importance Weights		1.00			Total			0	0

Relative Quality 1.00 #DIV/0!

B. Relative Price

AEDC	Other Sources		
	Consensus	Min	Max
1.00			

Relative Price 1.00 0

C. Quality / Price Weighting

 Weight on Quality + Weight on Price = 100%



Typical Quality Attributes

- **Schedule**
- **Data Quality**
- **Technical Expertise**
- **Personal Relationships**
- **Facility Capability**
- **Unique Facilities**
- **Flexibility**
- **Responsiveness**
- **Location**
- **Analysis Capability**
- **Technician Support**
- **Machining Support**
- **Assembly Support**



Directions

- **Appoint Stakeholder spokesman for the report out**
- **Define the Relative Value**
 - Identify Quality Attributes
 - Weight Quality Attributes (total weighting equals 1.00)
 - Grade AEDC on each attribute (Scale 1-10, 10 is best)
 - Grade Other Sources on each attribute
- **Define the Relative Cost**
 - $AEDC = 1.0$
 - Other Sources in relation to AEDC (e.g., 0.90 etc.)
- **Define the relative weights of quality and cost in determining selection of a test services source**
- **Revisit the Quality Attributes to address what quality issues and/or services AEDC could modify to reduce overall costs**
- **Collect results on hypertiles and spreadsheets**
- **Report results to group**



Industry Aero Stakeholder Group Report Out

INDUSTRY AERO STAKEHOLDER GROUP - REPORT OUT

Customer Value Worksheet

A. Relative Quality

Industry Aero

		Performance Scores: 1-10, 10 is best								
		AEDC			Other Sources			Weighted Scores		
Quality Attributes	Importance	Consensus	Min	Max	Consensus	Avg	Best	AEDC	Industry	
1 Data quality	0.4	8.3	7	9	8	7.8	10	3.32	3.12	
2 Knowledgeable work force	0.1	6.3	6	7	5	5	10	0.63	0.5	
3 schedule (availability, thruput, flexibility)	0.15	5.8	4	7	5	5	10	0.87	0.75	
4 facility capability and services	0.1	8	7	10	6	7	10	0.8	0.7	
5 relationship, cust svc, culture,	0.1	4.5	3	7	5	6	10	0.45	0.6	
6 consistency/dependability	0.15	5.5	5	7	5	6.3	10	0.825	0.945	
7						5.8			0	
8									0	
9									0	
10									0	
	1								0	
Sum of Importance Weights	1.00						Total	6.895	6.615	

Relative Quality

1.00 0.959391

B. Relative Price

AEDC	Other Sources		
	Consensus	Min	Max
1.00	0.5	0.3	0.7

Relative Price

1.00

0.5

C. Quality / Price Weighting

40

+

60

Weight on Price

=

100%



Industry Space Stakeholder Group Report Out

INDUSTRY SPACE STAKEHOLDER GROUP- REPORT OUT

Customer Value Worksheet

A. Relative Quality

		Performance Scores: 1-10, 10 is best						Weighted Scores	
Value Attributes		Importance	AEDC			Other Sources			
			Consensus	Min	Max	Consensus	Min	Max	AEDC Industry
1	Scheduel	0.4	7	5	8	8	5	9	2.8 3.2
2	Managed Technical Expertise/								
3	Core Group-Continuity	0.2	9	5	10	9.5	9	10	1.8 1.9
4	Onsite Instrument Calibration	0.15	4	3	6	8	7	8	0.6 1.2
5	Responsive & Flexible	0.15	6	4	9	7	4	9	0.9 1.05
6	Analysis Capability	0.1	8	5	10	8	6	10	0.8 0.8
7									0 0
8									0 0
9									0 0
10									0 0
Sum of Importance Weights		1.00	Total						6.9 8.15

Relative Quality

1.00 1.181159

B. Relative Price

AEDC	Other Sources		
	Consensus	Min	Max
1.00	0.8	0.2	1

Test Matrix Dependent

R

Relative Price

1.00

0.8

C. Quality / Price Weighting

65

Weight on Value

+

35

Weight on Price

=

100%

Given Data Qaulity- Recognized Standard (Non Neg)

Facility Capability-Unique Capability (Non Neg)



Government Stakeholder Group Report Out

GOVERNMENT STAKEHOLDER GROUP - REPORT OUT

Customer Value Worksheet

A. Relative Quality

		Performance Scores: 1-10, 10 is best							
Quality Attributes	Importance	AEDC			Other Sources			Weighted Scores	
		Consensus	Min	Max	Consensus	Min	Max	AEDC	Industry
Unique Test Capabilities	TBD							#VALUE!	#VALUE!
Schedule (but not always)	TBD							#VALUE!	#VALUE!
Personnel Relationships	TBD							#VALUE!	#VALUE!
Technology Advancement	TBD							#VALUE!	#VALUE!
Reporting/Analysis	TBD							#VALUE!	#VALUE!
E-commerce	TBD							#VALUE!	#VALUE!
MS/CFD Applications	TBD							#VALUE!	#VALUE!
Shop/Machining (Main)	TBD							#VALUE!	#VALUE!
Photographic Seviles	TBD							#VALUE!	#VALUE!
Model Mechanics/Machinists	TBD							#VALUE!	#VALUE!
Base Seviles ?	TBD							#VALUE!	#VALUE!
Sum of Importance Weights	1.00	Total						#VALUE!	#VALUE!

Relative Quality

1.00 #VALUE!

B. Relative Price

AEDC	Other Sources		
	Consensus	Min	Max
1.00	0.66	0.5	1

↑ "Pool" Influences

Relative Price

1.00

0.66

C. Quality / Price Weighting

Weight on Quality

+

Weight on Price

=

100%



Government Stakeholder Group Report Out (Cont'd)

GOVERNMENT STAKEHOLDER GROUP - REPORT OUT (Continued)

Point #1: Impossible tasking. Values swing widely based on many factors.

Point #2: Quality vs Price is "Non-sensical" trade space (quality pays it doesn't cost).

Point #3: Value changes dramatically based on many factors.



AEDC Group Report Out

AEDC GROUP - REPORT OUT

Customer Value Worksheet

A. Relative Quality

		Performance Scores: 1-10, 10 is best								
Quality Attributes	Importance	AEDC			Other Sources			Weighted Scores		
		Consensus	Min	Max	Consensus	Min	Max	AEDC	Industry	
1 Data Quality	0.14	9	8	10	8.5	8	9	1.26	1.19	
2 Schedule (meet neg schedule)	0.18	8	5	9	6	4	7	1.44	1.08	
3 Distinctive Simulation Capabilit	0.3	8	7	10	6	5	8	2.4	1.8	
4 Price Stability	0.04	4	1	5	8	6	9	0.16	0.32	
5 Analysis Capability	0.05	7	4	10	5	3	7	0.35	0.25	
6 Technical Expertise	0.1	7	6	8	6	4	8	0.7	0.6	
7 Responsiveness (to changes)	0.05	6	2	10	4	2	6	0.3	0.2	
8 Flexibility (expand/contract)	0.05	4	2	6	3	1	7	0.2	0.15	
9 Availability(when wanted)	0.05	5	3	9	7	5	9	0.25	0.35	
10 Price Visibility	0.04	5	2	10	8	6	10	0.2	0.32	
								0	0	
Sum of Importance Weights	1.00	Total						7.26	6.26	

Relative Quality

1.00 0.862259

B. Relative Price

AEDC	Other Sources		
	Consensus	Min	Max
1.00	0.5	0.25	1.1

Relative Price

1.00

0.5

C. Quality / Price Weighting

0.25 Weight on Quality

+

0.75 Weight on Price

=

100%



Industry Turbines Stakeholder Group Report Out

INDUSTRY TURBINES STAKEHOLDER GROUP REPORT OUT

Customer Value Worksheet

A. Relative Quality

Turbines

		Performance Scores: 1-10, 10 is best							
		AEDC			Other Sources			Weighted Scores	
Quality Attributes		Importance	Consensus	Min	Max	Consensus	Min	Max	AEDC Industry
1	Schedule, cycle time, thruput	0.35	3	3	4	7.3	7	8	1.05 2.555
2	Stable OPS, Plant quality, consistent resource availability	0.04	4	3	4	7	6	8	0.16 0.28
3	Flexibility (schedule, test matrix, call audible)	0.04	3.5	3	4	7	5	9	0.14 0.28
4	data quality - min variation	0.35	8	7	8	7.2	7	8	2.8 2.52
5	(technology skunk works solutions)	0.01	7.2	7	9	7.6	7	8	0.072 0.076
	Evaluation support	0.01	8	8	9	8	8	8	0.08 0.08
6	facilitization/capitalization	0.1	7.5	6	9	7	7	7	0.75 0.7
7	accountability for results	0.1	4.2	2	4	9	9	9	0.42 0.9
8									0 0
9									0 0
10									0 0
		1							0 0
Sum of Importance Weights		1.00	Total						5.472 7.391

Relative Quality

1.00 1.350694

B. Relative Price

AEDC	Other Sources		
	Consensus	Min	Max
1.00	0.4	0.3	0.5

Relative Price

1.00 0.4

C. Quality / Price Weighting

25

+

75

Weight on Price

=

100%